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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,628	04/05/2001	Ylian Saint-Hilaire	10559/425001/P10439	5525
20985 FISH & RICH	7590 10/19/2007 ARDSON PC	•	EXAMINER	
P.O. BOX 1022			NGUYEN, THANH T	
MINNEAPOL	IS, MN 55440-1022	<i>,</i> ,	ART UNIT	PAPER NUMBER
			2144	
			MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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ş Î	09/828,628	SAINT-HILAIRE ET AL.
Office Action Summary	Examiner	Art Unit
	Tammy T. Nguyen	2144
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status .	•	•
Responsive to communication(s) filed on <u>July 2</u> This action is <b>FINAL</b> .  Since this application is in condition for allowar closed in accordance with the practice under E	nce except for formal matters, pro	•
Disposition of Claims	•	
4) ⊠ Claim(s) 1-12,16-26 and 31-42 is/are pending i 4a) Of the above claim(s) is/are withdrav 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-12, 16-26, and 31-42 is/are rejected 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers	•	
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on <u>05 April 2001</u> is/are: a) Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Ex	☑ accepted or b)☐ objected to drawing(s) be held in abeyance. Set ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive i (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Di 5)  Notice of Informal F 6)  Other:	

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## **Detailed Office Action**

- 1. This action is responsive to the amendment filed on July 12, 2007.
- 2. Claims 1-12, 16-26, and 31-32, 34-42 are pending.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
  - 4. Claims 1-2, 5-8, 16, 19-23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy et al., (hereinafter Rudy) U.S. Patent No. 6,360,252 in view of Katseff et al., (hereinafter Katseff) U.S. Patent No. 6,556,560.
  - 5. As to claim 1, Rudy discloses the invention substantially as claimed, Rudy teaches including a method comprising: preparing, at a first unit in a source device, first information to be transmitted to a destination across network link, wherein the source

device comprises a mobile device, and wherein the destination comprises a home network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately preparing, at a second processing unit in the source device separate from the first processing unit, second information to be transmitted to the destination, wherein the second information does not have a reliability requirement [col.7, lines 14-22, transmitting video image, text or multimedia documents]. However, Rudy does not explicitly disclose with a reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.

- 6. In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a pre-determined reliability requirement, [see, Katseff, col.3, lines 50-60] (TCP/IP protocol); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Katseff, col.3, lines 50-63] (transmitting audio data because, for packet telephony, retransmitting lost audio data will degrade a conversation).
- 7. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second

information to be transmitted across the network link for the purpose of increasing sampling rate allow the audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20].

- 8. As to claim 2, Rudy teaches the invention as claimed, further comprising aggregating first and second information sent from applications into the data stream (see 7, lines 14-22).
- 9. As to claim 5, Rudy teaches the invention as claimed, in which preparing the first information includes processing the information according transmission requirement of the source device (Fig.3).
- 10. As to claim 6, Rudy teaches the invention as claimed, in which preparing the first information includes processing the first information according to a transmission requirement of the network link (Fig.17).
- 11. As to claim 7, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the source device (fig.3).
- 12. As to claim 8, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the network link (Fig.17).
- 13. As to claim 16, Rudy discloses the invention substantially as claimed, Rudy teaches including a method comprising: preparing, at a first unit in a source device, first information to be transmitted to a destination across network link, wherein the source device comprises a mobile device, and wherein the destination comprises a home

network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately preparing, at a second processing unit in the source device separate from the first processing unit, second information to be transmitted to the destination, wherein the second information does not have a reliability requirement [col.7, lines 14-22, transmitting video image, text or multimedia documents]. However, Rudy does not explicitly disclose with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.

- 14. In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a reliability requirement, [see, Katseff, col.3, lines 50-60] (*TCP/IP protocol*); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Katseff, col.3, lines 50-63] (*transmitting audio data because, for packet telephony, retransmitting lost audio data will degrade a conversation*).
- 15. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link for the purpose of increasing

- sampling rate allow the audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20].
- 16. As to claim 19, Rudy teaches the invention as claimed, in which preparing the first information according to information includes processing first information according to a transmission requirement of the source device (fig.3).
- 17. As to claim 20, Rudy teaches the invention as claimed, in which preparing the first information includes processing the first information according to a transmission requirement of the network link (fig.17).
- 18. As to claim 21, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according a transmission requirement of the source device (Fig.17).
- 19. As to claim 22, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the network link (fig.17).
- As to claim 23, Rudy discloses the invention substantially as claimed, Rudy teaches including a system comprising: first mechanism located at a first side of a network link and configured to prepare first information included stream information that requires reliable transmission from a source transmission across the network link, wherein the source comprises a mobile device, wherein the destination comprises a home network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately prepare second information included in the stream that does not require reliable transmission

to the destination for transmission across the network link [col.7, lines 14-22, transmitting video image, text or multimedia documents], and prepare the stream for transmission across the network link and a second mechanism located at a second side of the network and configured (see col.27, lines 34-46, and col.28, lines 49-63).

- 21. However, Rudy does not explicitly disclose with a reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.
- 22. In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a pre-determined reliability requirement, [see, Katseff, col.3, lines 50-60] (*TCP/IP protocol*); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Katseff, col.3, lines 50-63] (transmitting audio data because, for packet telephony, retransmitting lost audio data will degrade a conversation).
- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link for the purpose of increasing sampling rate allow the audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20].

- 24. As to claim 25, Rudy teaches the invention as claimed, in which preparing the first information and the second information includes processing the information and the other information according to a transmission requirement of the source (Fig.17).
- 25. As to claim 26, Rudy teaches the invention as claimed, in which preparing the first information and the second information includes processing the first information and the second information according to a transmission requirement of the network link (Fig.13).
- 26. Claims 3-4, 8-10, 17-18, 24, 31-32, and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy et al., (hereinafter Rudy) U.S. Patent No. 6,360,252 in view of Katseff et al., (hereinafter Katseff) U.S. Patent No. 6,556,560, further in view of Maged E. Bashai., (hereinafter Bashai) U.S. Patent No. 6,580,721.
- As to claims 3, and 17, Rudy teaches the invention as claimed, in which preparing the information includes the first information (see 7, lines 14-22). Rudy does not explicitly disclose associating header information and control information.
- 28. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses associating header information and control information, [see, Bashai, col. 12, lines 11-31) (packet passed from a source which may include header (s) and other control information required).
- 29. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a

routing and rate control in a universal transfer mode network with the teachings of Rudy to have associating header information and a control information, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].

- 30. As to claims 4, and 18, Rudy teaches the invention as claimed, in which preparing the other information includes the second information (see 7, lines 14-22). Rudy does not explicitly disclose associating header information and control information.
- 31. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses associating header information and control information, [see, Bashai, col. 12, lines 11-31) (packet passed from a source which may include header (s) and other control information required).
- 32. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have associating header information and a control information, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].
- As to claims 9 and 10, Rudy discloses the invention as claimed, further comprising, at a destination side of the network link [see fig.17]. However, Rudy does not explicitly disclose removing the header information and the control information from the first information.
- 34. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses removing header information and

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control information from the data packets [see, Bashai, col. 6, line 53-67 and col. 12, lines 14-22

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- 35. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have removing header information and control information from the data packets, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].
- 36. As to claim 24, Rudy teaches the invention as claimed, in which preparing the first information and the other information includes the first information and other information (see 7, lines 14-22). Rudy does not explicitly disclose associating second header information and a control information.
- 37. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses associating second header information and control information, [see, Bashai, col. 12, lines 11-31) (packet passed from a source which may include header (s) and other control information required).
- 38. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have associating header information and a control information, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].

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- 39. As to claim 31, Rudy discloses the invention substantially as claimed, Rudy teaches including an article comprising: a machine o readable medium which stores machine executable instructions, the instruction causing a machine to; processing reliable information is configured to require a reliability requirement for transmission (see col.7, lines 14-22); process unreliable information that does not have a transmission reliability requirement the unreliable information (see col.7, lines 14-21); and processing the reliable information and unreliable information to be sent on a stream of information (see col.27, lines 34-46, and col.28, lines 49-63), wherein the unreliable information is configured for a reduced processing requirement than a processing requirement for the reliable information (see col.21, lines 54-67). However, Rudy does not explicitly disclose a pre-determined reliability requirement.
- 40. In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a pre-determined reliability requirement, [see, Katseff, col.3, lines 50-60] (*TCP/IP protocol*).
- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a pre-determined reliability requirement, for the purpose of increasing sampling rate allow the audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20].
- 42. Rudy and Katseff do not explicitly discloses associate a first and second headers information and first and second control information.

- 43. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses associate a first and second headers information and first and second control information, [see, Bashai, col. 12, lines 11-31) (packet passed from a source which may include header (s) and other control information required).
- 44. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have associating header information and a control information, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].
- 45. As to claim 32, Rudy discloses the invention substantially as claimed, Rudy teaches wherein the unreliable information is configured to not require a reliability requirement for transmission (see col.21, lines 54-67). However, Rudy does not explicitly disclose with a reliability requirement.
- 46. In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a pre-determined reliability requirement, [see, Katseff, col.3, lines 50-60] (*TCP/IP protocol*).
- 47. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a reliability requirement, for the purpose of increasing sampling rate allow the

audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20].

- 48. As to claim 34, Rudy teaches the invention as claimed, wherein the unreliable information is configured to use a lower amount of processing resource than the reliable information (fig.17).
- 49. As to claim 35, Rudy teaches the invention as claimed, wherein the processing of the reliable information comprises; forwarding the unreliable information to an unreliable packet fragmenter (see col.21, lines 54-67; and associated with reliable information to lower layer processing unit for the unreliable information processing (fig.13). Rudy and Katseff do not explicitly discloses associate first header information and control information.
- 50. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses associate first header information and control information [see, Bashai, col. 12, lines 11-31) (packet passed from a source which may include header (s) and other control information required).
- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have associating header information and a control information, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].
- 52. As to claim 36, Rudy teaches the invention as claimed, wherein the unreliable information processing comprises: framing the processed unreliable information,

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control information associated with processed unreliable information, and unreliable packet fragments; and forwarding the framed processed unreliable information, control information associated with the framed reliable information to a master stream processing unit (see col.7, lines 14-22).

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- As to claim 37, Rudy teaches the invention as claimed, further comprising instruction causing the machine to: process the stream of information; and send the stream of information to the home network (see fig.13).
- 54. As to claim 38, Rudy discloses the invention substantially as claimed, Rudy teaches including an article comprising: a machine readable medium which stores machine executable instruction, the instruction causing a machine to perform operation comprising: receiving a stream of information comprising reliable information and unreliable information (see col.7, lines 14-22, and col.22, lines 35-44); handle the unreliable information, wherein handling the unreliable information comprises: collecting data packets associated with the unreliable information; and forwarding the unreliable information to a first destination in the home network (see fig.13); and handling the reliable information, wherein handling the reliable information comprises: collecting data packets associated with the reliable information (see col.7, lines 14-22, and col.21, lines 54-67); the data packets associated with the reliable information; and forwarding the reliable information associated with the reliable information to a second destination in the home network (fig. 13).

However, Rudy does not explicitly disclose with a reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.

- In the same field of endeavor, Katseff discloses (e.g., Low-latency audio interface for packet telephony). Katseff disclose a pre-determined reliability requirement, [see, Katseff, col.3, lines 50-60] (*TCP/IP protocol*); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Katseff, col.3, lines 50-63] (*transmitting audio data because, for packet telephony, retransmitting lost audio data will degrade a conversation*).
- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Katseff's teachings of a Low-latency audio interface for packet telephony with the teachings of Rudy to have with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link for the purpose of increasing sampling rate allow the audio data to pass much more rapidly through the data conversion buffer [see Katseff, col.2, lines 10-20]. Also, Rudy and Katseff do not explicitly discloses removing header information and control information from the data packets.
- 58. In the same field of endeavor, Beshai discloses (e.g., routing and rate control in a universal transfer mode network). Bashai discloses removing header information and

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control information from the data packets [see, Bashai, col. 6, line 53-67 and col. 12, lines 14-22

- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bashai's teachings of a routing and rate control in a universal transfer mode network with the teachings of Rudy to have removing header information and control information from the data packets, for the purpose of providing its allocated bit rate is reduced [see col. 4, lines 15-25].
- 60. As to claim 39, Rudy teaches the invention as claimed, wherein the forwarding of the unreliable information occurs prior to the forwarding of the reliable information (see col.21, lines 54-67).
- As to claim 40, Rudy teaches the invention as claimed, wherein the forwarding of the unreliable information occurs prior to the forwarding of the unreliable information (see col.22, lines 35-44).
- As to claim 41, Rudy teaches the invention as claimed, wherein the handling of the unreliable information is not dependent on the handling of the reliable information (see col.21, lines 35-44, and col.22, lines 54-67).
- 63. As to claim 42, Rudy teaches the invention as claimed, wherein the unreliable information is configured to required a lower amount of handling operations than the reliable information (fig.17).

## Conclusion

64. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

65. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *William Vaughn* can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the

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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 24, 2007

William